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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SWANSON & BRATSCUN, LLC - IBM 1745 SHEA CENTER DRIVE, SUITE 330 HIGHLANDS RANCH, CO 80129				
			EXAMINER KRAVETS, LEONID	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/675,160	Applicant(s) GOODMAN ET AL.	
	Examiner Leonid Kravets	Art Unit 2189	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☒ Claim(s) 18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f):
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/29/03</u> . | 6) <input type="checkbox"/> Other: _____ |

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Claim Objections

1. Claims 18 and 19 are objected to because of the following informalities: "data filed" should be changed to "data field". Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. Claims 1-5, 8, 10-12, 14-17, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell (US Application 2003/0125834), and further in view of Braithwaite (US Patent 6,104,561).

As per claim 1, Campbell discloses an automated data storage library for accessing data storage media in response to commands from at least one external host system (Fig 1, 100), comprising:

- a housing unit (Fig 1, 100);
- a plurality of storage shelves for storing data storage cartridges within the housing unit, a data storage cartridge including data storage medium (Fig 1, 101);
- a data storage drive for reading data to and/or writing data from the data storage medium (Fig 5, 503);
- an interface for reading data from and/or writing data to at least one predetermined data field associated with the data storage cartridge [The drives can read/write to any data fields within the data cartridge (Fig 5, 503);

a robot accessor for transporting data storage cartridges between the storage shelves and the data storage drive (Fig 5, 502);

Campbell does not disclose a processor programmed with instructions to modify the at least one predetermined data field to render data stored on the data storage medium inaccessible.

Braithwaite discloses such a processor programmed with instructions to modify the at least one predetermined data field to render data stored on the data storage medium inaccessible (Column 2, lines 43-46, 53-55).

As per claim 2, the combination of Campbell and Braithwaite discloses the automated data storage library of claim 1, the processor further programmed with instructions to restore the at least one predetermined data field to render data stored on the data storage medium accessible (Column 2, lines 43-46, 51-53).

As per claim 3, the combination of Campbell and Braithwaite discloses the automated data storage library of claim 1, the processor further programmed with instructions to direct the data storage drive to apply a correction to the at least one predetermined data field wherein data stored on the data storage medium is rendered accessible [when the protection mode location on the storage medium is changed from one mode to the not inhibited mode, a correction is made to render the medium accessible (Column 2, lines 43-46, 51-53)].

As per claim 4, the combination of Campbell and Braithwaite discloses the automated data storage library of claim 1, wherein the at least one predetermined data field comprises at least one predetermined data field of a cartridge memory [a location is provided on a storage medium for a value indicative of a protection mode of the storage medium, the storage medium being a disk cartridge (Col 2, lines 43-46; Col 1, lines 14-15)].

As per claim 5, the combination of Campbell and Braithwaite discloses the automated data storage library of claim 1, wherein the at least one predetermined data field comprises at least one predetermined data field of the data storage medium [Braithwaite's disk cartridge is a storage medium (Col 1, Lines 18-19; Col 2, lines 43-46)].

As per claim 8, the combination of Campbell and Braithwaite discloses the automated data storage library of claim 1, wherein the interface is integrated with the storage drive [Braithwaite discloses using the drive to write a protection mode indicator onto the storage medium (Col 2, lines 36-41)].

As per claim 10, the combination of Campbell and Braithwaite discloses the automated data storage library of claim 1, wherein:

The at least one predetermined data field is integrated with the data storage medium (Fig 4); and

The interface comprises means for reading data from and/or writing data to the at least one predetermined data field [The disk drive must have such an interface for reading data from and/or writing data to the data field of Braithwaite].

As per claim 11, the combination of Campbell and Braithwaite discloses the automated data storage library of claim 1, further comprising an export station associated with the housing unit (Campbell, Fig 1, Ref 107), the processor further programmed with instructions to restore the predetermined data field and render data stored on the data storage medium accessible when the data storage cartridge is removed from the automated data storage library through the export station (Braithwaite, Col 3, Lines 18-27).

As per claim 12, the combination of Campbell and Braithwaite discloses a method for accessing data stored on data storage media stored within an automated data storage library (Campbell, Page 1, Paragraph 16), the data storage media housed within a data storage cartridge (Braithwaite, Col 1, lines 18-19), the method comprising:

retrieving a data storage cartridge from a storage shelf in the data storage library (Campbell, Page 1, Paragraph 18), at least one predetermined data field associated with the data storage cartridge having first contents whereby data stored on the data storage medium is accessible (Braithwaite, Col 2, Lines 51-53);

modifying the at least one predetermined data field to have second contents whereby the data stored on the data storage medium is inaccessible [Braithwaite allows

for the data field to be changed from accessible to inaccessible, since he discloses both of these states (Col 2, lines 53-55, line 63 - Col 3 line 3)].

As per claim 14, the combination of Campbell and Braithwaite discloses the method of claim 12, wherein the step of modifying the at least one predetermined data field is performed by an interface integrated with a data storage drive in the data storage library [Braithwaite discloses using the drive to write a protection mode indicator onto the storage medium (Col 2, lines 36-41)].

As per claim 15, the combination of Campbell and Braithwaite discloses the method of claim 12, further comprising:

modifying the at least one predetermined data field to have third contents whereby the data stored on the data storage medium is accessible (Braithwaite, Col 2, Lines 51-53, line 63 - Col 3 line 3); and

accessing the data stored on the data storage medium [accessing data when the data is accessible on the storage medium is obvious].

As per claim 16, the combination of Campbell and Braithwaite discloses the method of claim 15, wherein the step of accessing the data stored on the data storage medium comprises exporting the data storage cartridge from the data storage library [the disk drive of Campbell is used to read the tape and thus the data fields on the tape,

thus the cartridge is exported to access the data stored on the data storage medium (Fig 1)].

As per claim 17, the combination of Campbell and Braithwaite discloses the method of claim 12, further comprising:

providing a correction to the second contents for the at least one predetermined data field whereby the data stored on the data storage medium is accessible [providing a correction is interpreted to be changing to a different mode (Braithwaite, Col 2 line 63-Col 3 line 3); and

accessing the data stored on the data storage medium [accessing data when the data is accessible on the storage medium is obvious].

As per claim 19, the combination of Campbell and Braithwaite discloses the method of claim 12, wherein the at least one predetermined data field is recorded on the data storage media (Fig 4).

As per claim 20, the combination of Campbell and Braithwaite discloses a computer readable medium having computer-executable instructions to perform the method of claim 12 [a computer readable medium having computer-executable instructions is inherent to the method of claim 12, a data field on the data cartridge can only be modified using a computer program].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the protect sector of Braithwaite into the system of Campbell, since Campbell and Braithwaite form the same field of endeavor, namely mass data storage and this would allow for protection of sensitive data.

3. Claims 6, 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Braithwaite as applied to claim 1 above, and further in view of Kataoka (US Patent 5,857,021).

As per claim 6, the combination of Campbell and Braithwaite discloses the automated data storage library of claim 1, further comprising a plurality of logical libraries [Campbell discloses physical libraries (Fig 3, Ref. 100, 200) it is obvious that logical libraries can be used to achieve the same purpose]. Campbell does not disclose the processor further programmed with instructions to write an identifier, associated with at least one predetermined logical library, to the at least one predetermined data field whereby data stored on the data storage medium is accessible only to the at least one predetermined logical library.

Kataoka discloses writing an identifier into the storage medium identifying a terminal, allowing access to the storage medium only when the individual identifier extracted from the storage medium and the terminal identifier are both valid. (Col 1, line 64 – Col2, line 3). A terminal is defined as a device, through which data or information can be entered or displayed. The applicant's library is thus such a terminal.

As per claim 7, please see the rejection of claim 6 above.

As per claim 21, the system of Takayama discloses a method for accessing data stored on data storage media stored within an automated data storage library (Col 12, Lines 37-42), the data storage media housed within a data storage cartridge having a cartridge memory (Fig 1), the method comprising:

Takayama further discloses retrieving a data storage cartridge from a storage shelf in the data storage library for access by a first library (Col 12, Lines 59-61);

Kataoka discloses reading at least one identifier stored in the cartridge memory of the retrieved data storage cartridge (Col 4, Lines 63-66);

determining whether the at least one identifier read from the cartridge memory identifies the first library [A terminal is defined as a device, through which data or information can be entered or displayed. The applicant's library is thus such a terminal. (Col 5, Lines 11-15)]; and

if the at least one identifier read from the cartridge memory identifies the first library, accessing the data stored on the retrieved data storage cartridge (Col 5, lines 23-27); and

if the at least one identifier read from the cartridge memory does not identify the first library, preventing access to the data stored on the retrieved data storage cartridge (Col 5, 16-17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the identification of libraries of Kataoka into the system of Takayama, since Takayama and Kataoka form the same field of endeavor, namely mass data storage and this would allow for protection of data from unauthorized library access.

4. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Braithwaite, and further in view of Takayama (US Patent 6,195,007).

As per claim 9, the system of Campbell and Braithwaite discloses the automated data storage library of claim 1. They do not disclose the interface integrated with the storage device. Takayama discloses reading data from a cartridge memory using an interface attached to the robot arm (Fig 19, Ref 30).

As per claim 13, please see rejection of claim 9 above.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the interface on the robot arm of Takayama into the system of Campbell and Braithwaite, since Campbell, Braithwaite and Takayama form the same field of endeavor, namely mass data storage and this would allow for faster identification of tape security settings.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Braithwaite, and further in view of Takayama (US Patent 6,195,007).

As per claim 18, the system of Campbell and Braithwaite discloses the method of claim 12. They do not disclose that at least one predetermined date field is stored on a cartridge memory. The system of Takayama discloses a cartridge memory storing various information fields for the tape. The protection field of Braithwaite is such an information field and thus could be stored on the memory of Takayama.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the interface on the robot arm of Takayama into the system of Campbell and Braithwaite, since Campbell, Braithwaite and Takayama form the same field of endeavor, namely mass data storage and this would allow for faster identification of tape security settings, since Takayama explains the location on the tape holding the field settings would not have to be located each time the tape is accessed.

6. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama (US Patent 6,195,007) in view of Kataoka, and further in view of Campbell.

As per claim 22, the combination of Takayama and Kataoka disclose the method of claim 21. Kataoka and Takayama do not disclose that the first library is one of a plurality of logical libraries within the data storage library. Campbell discloses such a plurality of libraries [Campbell discloses physical libraries (Fig 3, Ref. 100, 200) it is obvious that logical libraries can be used to achieve the same purpose of larger amounts of data storage].

As per claim 23, please see rejection of claim 22 above.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the plurality of libraries of Campbell into the system of Kataoka and Takayama, since Takayama, Kataoka and Campbell form the same field of endeavor, namely mass data storage and this would allow for larger data storage capacity.

7. Claims 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama, and further in view of Braithwaite.

As per claim 24, Takayama discloses a controller for an automated storage library (Fig 19, Ref 80), comprising:

means for receiving a request to move a data storage cartridge (Col 12, Lines 59-61);

means for directing a robot accessor to retrieve the data storage cartridge from a storage shelf within the automated storage library (Col 12, Lines 59-61);

Braithwaite further discloses means for performing a first modification of at least one predetermined data field associated with the data storage cartridge to render data stored on the data storage medium accessible (Col 2 lines 51-53, 63-67);

means for providing access to the data on the data storage medium (Fig 19, Ref 10);

means for performing a second modification of the at least one predetermined data field to render the data stored on the data storage medium inaccessible ((Col 2 lines 53-55, 63-67); and

means for directing the robot accessor to return the data storage cartridge to a storage shelf within a housing unit of the automated storage library [Takayama discloses housing the tape with respect to the magazine (Col 12, Lines 43-44)].

As per claim 25, the combination of Campbell and Braithwaite discloses the controller of claim 24, the means for performing the first modification comprising means for directing the data storage drive to apply a correction to the at least one predetermined data field to render the data stored on the data storage medium accessible [when the protection mode location on the storage medium of Braithwaite is changed from one mode to the not inhibited mode, a correction is made to render the medium accessible (Column 2, lines 43-46, 51-53)].

As per claim 26, the combination of Campbell and Braithwaite discloses the controller of claim 24, wherein:

the means for performing the first and second modifications comprises a cartridge memory interface for interfacing with a cartridge memory integrated with the data storage cartridge [The cartridge memory of Takayama is used to store tape identification information (Fig 10)]; and

the at least one predetermined data field comprises at least one data field of the cartridge memory [The protection field of Braithwaite can be stored on this non-volatile memory to achieve the same result].

As per claim 27, the combination of Campbell and Braithwaite discloses the controller of claim 26, wherein the cartridge memory interface is associated with the robot accessor (Fig 19, Ref 30).

As per claim 28, the combination of Campbell and Braithwaite discloses the controller of claim 26, wherein the cartridge memory interface is associated with the data storage drive [Associated means joined in some kind of relationship. Since the robot arm brings the tape to the data storage drive, the cartridge memory interface is associated with the data storage drive (Fig 19, Ref 30)].

As per claim 29, the combination of Campbell and Braithwaite discloses the controller of claim 24, wherein the at least one predetermined data field comprises at least one data field of the data storage medium (Braithwaite, Fig 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the data protection field of Braithwaite into the system of Takayama, since Takayama and Braithwaite form the same field of endeavor, namely mass data storage and this would allow for improved identification and security of tape cartridges.

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takayama in view of Braithwaite, and further in view of Campbell and Kataoka.

As per claim 30, Takayama and Braithwaite disclose the controller of claim 24.

Campbell further discloses the automated storage library comprising a plurality of libraries (Fig 3, Ref. 100, 200); and

Katayama discloses the controller further comprising means for writing at least one identifier, associated with at least one predetermined library, to the cartridge memory whereby data stored on the data storage medium is accessible only to the at least one predetermined library (Col 1 line 64 – Col 2, line 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the multiple libraries and identification thereof of Campbell and Kataoka into the system of Takayama and Braithwaite, since Braithwaite, Takayama, Braithwaite and Kataoka form the same field of endeavor, namely mass data storage and this would allow for secure access and protection to larger amounts of data.

Conclusion

9. The following is text cited from 37 CFR 1.111(c): In amending in reply to a rejection of claims in an application or patent under reexamination, the applicant or patent owner must clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. The applicant or patent owner must also show how the amendments avoid such references or objections.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Kravets whose telephone number is 571-272-2706. The examiner can normally be reached on M-F, 8-4:30.
12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached at 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

L.R.
Leonid Kravets
Patent Examiner
Art Unit 2189

October 4, 2005


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